

### Purpose:

Big Ox Energy-Siouxland, LLC (BOE) manages the receipt, handling, and processing of hauled material received at its South Sioux City, Nebraska biogas manufacturing plant in accordance with this Hauled Material Acceptance Plan ("Plan"). This plan has ensures that only BOE only receives material that is compatible for treatment and reduces potential impacts to the operation of the City of Sioux City Wastewater Treatment Plant (WWTP).

BOE refuses and avoids materials that would cause its biogas manufacturing process to function improperly (thus limiting its production of commercial sellable product (biogas)). BOE refuses and avoids materials that inhibits BOE's onsite anaerobic treatment process or affect BOE's discharge compliance with Sioux City Wastewater Discharge Permit #2016-31-I

# Material Acceptance Criteria:

BOE receives organically based and biodegradable truck-hauled waste materials ("hauled materials") under contract, primarily food processing materials on an as required (random) basis. BOE distinctly approves and accepts every customer and every hauled material type. BOE requires that every customer submit a request to deliver hauled material using a Material Profile Form ("MPF"). The MPF specifies hauled material information including estimated volume, chemical analysis, a Safety Data Sheet (if applicable), or data from a material stream similar in nature to the one proposed for disposal. BOE reviews the customer's signed MPF to ensure the hauled material is free of toxic/hazardous materials and is compatible for treatment with BOE biogas operation.

BOE also independently tests the customer's material in its own laboratory to verify hauled material content prior to approval. Following approval by BOE, the customer is returned a signed and approved copy of the MPF specifying the type and amount of hauled material which BOE will accept. BOE then issues the customer a Master Service Agreement ("MSA"). BOE retains documentation of all delivered hauled materials including date(s) of receipt, load point of origination, material characteristic's, and the amount received for at least 3 years.

All hauled material loads received at BOE must have a Chain of Custody (COC) signed by the generator of the material stating that the material being delivered has not deviated from the material approved for disposal and treatment and that it does not contain hazardous or toxic material. All discharge data is tracked on the COC and in the facility's data tracking system including the pH, temperature and volume of the load delivered.

### **Verification Testing:**

BOE performs independent sampling and analysis of hauled materials to verify that received loads have the same characteristics as specified in the MSA. If independent analysis indicates deviation from the approved MPF, the material shall be rejected for treatment until such time that a new MPF and MSA are effective. If a new MSA cannot be agreed upon then the acceptance shall be terminated indefinitely.

## Material Treatment.

Hauled materials are blended for anaerobic digestion. Once accepted and processed, BOE dewaters the resulting sludge for third party disposal. BOE blends the dewatered centrate with influent industrial/sanitary wastewater, neutralizes the blend and removes solids prior to discharge to the sanitary sewer for conveyance to the Sioux City WWTP.

# Material Being Accepted:

Gelatin Bone Residue

Gelatin Sludge and DAF Solids Floats and Solids

Teff Grass

Pet Food Sludge

Paunch/Manure

Slaughterhouse Flashings

Slaughterhouse Sludge and DAF Floats and Solids

Dairy Material

Municipal Wastewater/Sludge

Food Syrup

Soy Gums

Scrap Bakery and Brewery Yeast

**Tannery Solids** 

Diatomaceous Earth

Food Producer DAF Floats and Solids

Bean Wash water

Egg Slurry

Stillage

Food Service Establishment Material

**Delactose Permeate** 

# Certification:

Based upon my inquiry of the staff and the personnel directly responsible for the preparation of this document and for meeting the criteria of the Hauled Material Acceptance Plan, I certify that the information in it is, to the best of my knowledge; true, accurate, and complete. Big Ox Energy Siouxland, LLC will abide by the provisions of the Hauled Material Acceptance Plan.

Desur McCarlin Desiree McCaslen, Director of Regulatory Compliance

Attachment #1

Material Profile Form

Attachment #2

Chain of Custody



Company:			
Contact:			
Address:			
Telephone:			
Description of Source of	f Waste:		
Part II – Generator Ce			
Energy as part of the Ma	aster Service Agreement ion listed is true and acc	that the wastewater described above does not State, or Municipal Code, for the waste approt (MSA) for acceptance and treatment at Big curate and the waste being delivered has not dISA."	ved by Big O
Signature:		Date:	
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Part III - Carrier/Truck	t Information		
Part III - Carrier/Truck	t Information	Truck #: Trailer #:	
Part III - Carrier/Truck  Carrier:  Part IV - Scale House/	Acceptance Criteria		
Part III - Carrier/Truck  Carrier:  Part IV - Scale House/  Date:	Acceptance Criteria Time In:	Truck #: Trailer #:AM/PM Time Out:	AM/PN
Part III - Carrier/Truck  Carrier:  Part IV - Scale House/  Date:  Full Weight:	Acceptance Criteria Time In:lbs.	Truck #: Trailer #:  AM/PM Time Out:  Temperature Upon Delivery:  pH upon Delivery:	AM/PN
Part III - Carrier/Truck  Carrier:  Part IV - Scale House/  Date:  Full Weight:  Empty Weight:	Acceptance Criteria Time In:lbslbs.	Truck #: Trailer #:  AM/PM Time Out:  Temperature Upon Delivery:  pH upon Delivery:	AM/PN
Part III - Carrier/Truck  Carrier:  Part IV - Scale House/	Acceptance Criteria Time In:lbslbslbs.	Truck #: Trailer #:  AM/PM Time Out:  Temperature Upon Delivery:  pH upon Delivery:	AM/PN
Part III - Carrier/Truck  Carrier:  Part IV - Scale House/  Date:  Full Weight:  Empty Weight:  NET Weight:	Acceptance Criteria Time In:lbslbslbs.	Truck #: Trailer #:  AM/PM Time Out:  Temperature Upon Delivery:  pH upon Delivery:  Scale Ticket #:  Incoming Seal # Back:  Outgoing Seal # Back:	AM/PN

Big Ox Energy will accept the above listed waste for disposal and treatment under the following conditions: 1. The wastewater does not contain any hazardous materials.

- 2. The waste must be consistent with the waste approved for disposal and treatment, any deviation from the approved waste may result in refusal of treatment.
- 3. This Chain of Custody must be signed by an authorized representative of the company (Industrial Generator).

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REQUESTED FACILITY:	

Current address:							
City:	State:						
Contact Name:	Contact Email:			ZIP Co	<u> </u>		
Generator EPA ID:				T		one:	
Billing Information		Total Indiana		State I	D:		
Same as Generator?		Control		e al Kapata			
Billing Name:	Dill	Contact Na	ame:				
City:	State:	ling Address:					
Phone:	E-mail:				ZIP Code:		
Hauler Name:	PO#:			Fax:			
Material Information	10#.		Payment	Method:	Accoun	t / Cash / Credit Card	
Common Name:		estas ir ir	Salut (S)	u dwi a Vari			
Describe Process Generating Material:							
Material Composition:							
Physical State: Solid / Liquid / Other	1/1:		State Code:			Color:	
trong Odor: Yes / No Describe: Free Liquid %:				pH:			
Analytical Attached:				Flash Point:			
Regulatory Information				SDS Atta	ched: Ye	es / No	
acility SIC/NAICS Code:			40.00				
retreatment of Wastewater: Yes / No	Permitted under 40 CFR 403: Yes / No			Categorical Industrial User: Yes / No			
	Classified as Ha	zardous Waste:	Yes / No				
lease attach a list of chemicals used or stourent disposal method:	ored onsite that could affe	ect the integrity of	of the mater	rial being d	isposed	of.	
hipping Information							
ne time event:							
stimated Quantity Per event or Week:		Repeat or On-going:					
elivery Type: (trailer/container)	Unit of Measure: Tons / Pounds / Gallons /						
Generator Certification		USDOT Shipping Name:					
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